t10_pralg_1 (TMW-Pqy1AaXcumxmUg37V3h3xTHKnZBued5U)

October 27, 2020

Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_numbers : \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $g1\_unialg\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $k8\_pralg\_1 : \iota \Rightarrow \iota$ be given. Let $v1\_unialg\_1 : \iota \Rightarrow o$ be given. Let $v2\_unialg\_1 : \iota \Rightarrow o$ be given. Let $v3\_unialg\_1 : \iota \Rightarrow o$ be given. Let $v4\_unialg\_1 : \iota \Rightarrow o$ be given. Let $l1\_unialg\_1 : \iota \Rightarrow o$ be given. Let $v4\_margrel1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5\_margrel1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_finseq\_1 : \iota \Rightarrow o$ be given. Let $k3\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_card\_1 : \iota \Rightarrow \iota$ be given. Let $k4\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_finseq\_2 : \iota \Rightarrow \iota$ be given. Let $v1\_card\_1 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $k4\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_pralg\_1 : \iota \Rightarrow \iota$ be given. Let $u1\_unialg\_1 : \iota \Rightarrow \iota$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(m2\_finseq\_1\ X0\ k5\_numbers) \Rightarrow ((v4\_margrel1\ (k8\_pralg\_1\ X0)\ (k1\_tarski\ k1\_xboole\_0)) \wedge ((v5\_margrel1\ (k8\_pralg\_1\ X0)\ (k1\_tarski\ k1\_xboole\_0)) \wedge (v2\_relat\_1\ (k8\_pralg\_1\ X0)))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Rightarrow (X0 = k1\_xboole\_0) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0) \Leftrightarrow (m1\_finseq\_1\ X1\ X0) \tag{3}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge (v1\_finseq\_1\ X0))) \Rightarrow (k3\_finseq\_1\ X0 = k1\_card\_1\ X0) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1\ X1\ (k4\_partfun1\ (k3\_finseq\_2\ X0)\ X0)) \Rightarrow (\forall X2.\forall X3.(g1\_unialg\_1\ X0\ X1 = g1\_unialg\_1\ X2\ X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \tag{5}$$

Assume the following.

$$\forall X0.\neg v1\_xboole\_0\ (k1\_tarski\ X0) \tag{6}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow((\neg v1\_xboole\_0\ (k1\_card\_1\ X0))\wedge (v1\_card\_1\ (k1\_card\_1\ X0))) \tag{7}$$

Assume the following.

$$v1\_xboole\_0\ k1\_xboole\_0 \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0)\wedge(m1\_finseq\_1\ X1\ (k4\_partfun1\ (k3\_finseq\_2\ X0)\ X0)))\Rightarrow((\neg v2\_struct\_0\ (g1\_unialg\_1\ X0\ X1))\wedge(v1\_unialg\_1\ (g1\_unialg\_1\ X0\ X1))) \tag{9}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0)\Rightarrow((v1\_xboole\_0\ (k1\_card\_1\ X0))\wedge(v1\_card\_1\ (k1\_card\_1\ X0))) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0)\Rightarrow((v1\_funct\_1\ X1)\wedge((v1\_finseq\_1\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ X0))))) \tag{11}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1\ X1\ X0)\Rightarrow((v1\_relat\_1\ X1)\wedge((v1\_funct\_1\ X1)\wedge(v1\_finseq\_1\ X1))) \tag{12}$$

Assume the following.

$$\forall X0.(m1\_finseq\_1\ X0\ k5\_numbers)\Rightarrow(m2\_finseq\_1\ (k8\_pralg\_1\ X0)\ (k4\_partfun1\ (k3\_finseq\_2\ (k1\_tarski\ k1\_xboole\_0))\ (k1\_tarski\ k1\_xboole\_0))) \tag{13}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1\ X1\ (k4\_partfun1\ (k3\_finseq\_2\ X0)\ X0))\Rightarrow((v1\_unialg\_1\ (g1\_unialg\_1\ X0\ X1))\wedge(l1\_unialg\_1\ (g1\_unialg\_1\ X0\ X1))) \tag{14}$$

Assume the following.

$$\forall X0.(m2\_finseq\_1\ X0\ k5\_numbers)\Rightarrow(\forall X1.(m2\_finseq\_1\ X1\ (k4\_partfun1\ (k3\_finseq\_2\ (k1\_tarski\ k1\_xboole\_0))\ (k1\_tarski\ k1\_xboole\_0)))\Rightarrow((X1 = k8\_pralg\_1\ X0)\Leftrightarrow((k3\_finseq\_1\ X1 = k3\_finseq\_1\ X0)\wedge(\forall X2.(v7\_ordinal1\ X2)\Rightarrow((X2 \in k4\_finseq\_1\ X1)\Rightarrow(\forall X3.(v7\_ordinal1\ X3)\Rightarrow((X3 = k1\_funct\_1\ X0\ X2)\Rightarrow(k1\_funct\_1\ X1\ X2 = k7\_pralg\_1\ X3)))))))) \tag{15}$$

Assume the following.

$$\forall X0.(l1\_unialg\_1\ X0)\Rightarrow((v4\_unialg\_1\ X0)\Leftrightarrow((u1\_unialg\_1\ X0\neq k1\_xboole\_0)\wedge(v2\_relat\_1\ (u1\_unialg\_1\ X0)))) \tag{16}$$

Assume the following.

$$\forall X0.(l1\_unialg\_1\ X0)\Rightarrow((v3\_unialg\_1\ X0)\Leftrightarrow(v5\_margrel1\ (u1\_unialg\_1\ X0)\ (u1\_struct\_0\ X0))) \tag{17}$$

Assume the following.

$$\forall X0.(l1\_unialg\_1\ X0)\Rightarrow((v2\_unialg\_1\ X0)\Leftrightarrow(v4\_margrel1\ (u1\_unialg\_1\ X0)\ (u1\_struct\_0\ X0))) \tag{18}$$

Assume the following.

$$\forall X0.(l1\_unialg\_1\ X0)\Rightarrow((v1\_unialg\_1\ X0)\Rightarrow(X0 = g1\_unialg\_1\ (u1\_struct\_0\ X0)\ (u1\_unialg\_1\ X0))) \tag{19}$$

Theorem 1

$$\forall X0.(m2\_finseq\_1\ X0\ k5\_numbers)\Rightarrow((X0\neq k1\_xboole\_0)\Rightarrow((\neg v2\_struct\_0\ (g1\_unialg\_1\ (k1\_tarski\ k1\_xboole\_0)\ (k8\_pralg\_1\ X0)))\wedge((v1\_unialg\_1\ (g1\_unialg\_1\ (k1\_tarski\ k1\_xboole\_0)\ (k8\_pralg\_1\ X0)))\wedge((v2\_unialg\_1\ (g1\_unialg\_1\ (k1\_tarski\ k1\_xboole\_0)\ (k8\_pralg\_1\ X0)))\wedge((v3\_unialg\_1\ (g1\_unialg\_1\ (k1\_tarski\ k1\_xboole\_0)\ (k8\_pralg\_1\ X0)))\wedge((v4\_unialg\_1\ (g1\_unialg\_1\ (k1\_tarski\ k1\_xboole\_0)\ (k8\_pralg\_1\ X0)))\wedge(l1\_unialg\_1\ (g1\_unialg\_1\ (k1\_tarski\ k1\_xboole\_0)\ (k8\_pralg\_1\ X0))))))))))$$