t22_pcs_0 (TMNFHFJciwjnZg89sTehcGFN88sbDV9Mg9y)

October 27, 2020

Let $l2\_pcs\_0 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k19\_pcs\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l1\_orders\_2 : \iota \Rightarrow o$ be given. Let $l1\_pcs\_0 : \iota \Rightarrow o$ be given. Let $v12\_pcs\_0 : \iota \Rightarrow o$ be given. Let $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1\_orders\_2 : \iota \Rightarrow \iota$ be given. Let $u1\_pcs\_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X0\ X1) \Rightarrow ((v1\_xboole\_0\ X1) \vee (X0 \in X1)) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(k4\_tarski\ X0\ X1 \in k2\_zfmisc\_1\ (k1\_tarski\ X2)\ X3) \Leftrightarrow ((X0 = X2) \wedge (X1 \in X3)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(\neg v1\_xboole\_0\ X0) \Rightarrow (\neg v1\_xboole\_0\ (k2\_xboole\_0\ X1\ X0)) \tag{3}$$

Assume the following.

$$\forall X0.\neg v1\_xboole\_0\ (k1\_tarski\ X0) \tag{4}$$

Assume the following.

$$\forall X0.(l2\_pcs\_0\ X0) \Rightarrow ((l1\_orders\_2\ X0) \wedge (l1\_pcs\_0\ X0)) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(l2\_pcs\_0\ X0) \Rightarrow ((v12\_pcs\_0\ (k19\_pcs\_0\ X0\ X1)) \wedge (l2\_pcs\_0\ (k19\_pcs\_0\ X0\ X1))) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.k4\_tarski\ X0\ X1 = k2\_tarski\ (k2\_tarski\ X0\ X1)\ (k1\_tarski\ X0) \tag{7}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))\Rightarrow((r1\_orders\_2\ X0\ X1\ X2)\Leftrightarrow(k4\_tarski\ X1\ X2 \in u1\_orders\_2\ X0)))) \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k2\_xboole\_0\ X0\ X1)\Leftrightarrow(\forall X3.(X3 \in X2)\Leftrightarrow((X3 \in X0)\vee(X3 \in X1))) \tag{9}$$

Assume the following.

$$\forall X0.(l2\_pcs\_0\ X0)\Rightarrow(\forall X1.\forall X2.((v12\_pcs\_0\ X2)\wedge(l2\_pcs\_0\ X2))\Rightarrow((X2 = k19\_pcs\_0\ X0\ X1)\Leftrightarrow((u1\_struct\_0\ X2 = k2\_xboole\_0\ (k1\_tarski\ X1)\ (u1\_struct\_0\ X0))\wedge((u1\_orders\_2\ X2 = k2\_xboole\_0\ (k2\_zfmisc\_1\ (k1\_tarski\ X1)\ (u1\_struct\_0\ X2))\ (u1\_orders\_2\ X0))\wedge(u1\_pcs\_0\ X2 = k2\_xboole\_0\ (k2\_xboole\_0\ (k2\_zfmisc\_1\ (k1\_tarski\ X1)\ (u1\_struct\_0\ X2))\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X2)\ (k1\_tarski\ X1)))\ (u1\_pcs\_0\ X0)))))) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.k2\_xboole\_0\ X0\ X1 = k2\_xboole\_0\ X1\ X0 \tag{11}$$

Assume the following.

$$\forall X0.\forall X1.k2\_tarski\ X0\ X1 = k2\_tarski\ X1\ X0 \tag{12}$$

Theorem 1

$$\forall X0.(l2\_pcs\_0\ X0)\Rightarrow(\forall X1.\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ (k19\_pcs\_0\ X0\ X1)))\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ (k19\_pcs\_0\ X0\ X1)))\Rightarrow((X2 = X1)\Rightarrow(r1\_orders\_2\ (k19\_pcs\_0\ X0\ X1)\ X2\ X3))))$$