t29_mod_2 (TMRY1VghFMWgvfP4atAg3yAYTg5LXXhu1EN)

October 27, 2020

Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v1\_classes2 : \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k18\_mod\_2 : \iota$ be given. Let $u1\_algstr\_0 : \iota \Rightarrow \iota$ be given. Let $k5\_vectsp\_1 : \iota \Rightarrow \iota$ be given. Let $k4\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $u2\_algstr\_0 : \iota \Rightarrow \iota$ be given. Let $k5\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_ordinal1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v36\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l1\_struct\_0 : \iota \Rightarrow o$ be given. Let $l3\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l1\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l6\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l2\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l5\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l4\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l4\_struct\_0 : \iota \Rightarrow o$ be given. Let $l3\_struct\_0 : \iota \Rightarrow o$ be given. Let $l2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v2\_classes1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.\neg(X0 \in X1) \wedge (v1\_xboole\_0\ X1) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X0\ X1) \Rightarrow ((v1\_xboole\_0\ X1) \vee (X0 \in X1)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(v1\_ordinal1\ X2) \Rightarrow (((X0 \in X1) \wedge (X1 \in X2)) \Rightarrow (X0 \in X2)) \tag{3}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.((\neg v1\_xboole\_0\ X1) \wedge (v1\_classes2\ X1)) \Rightarrow ((\forall X2.((v1\_funct\_1\ X2) \wedge ((v1\_funct\_2\ X2\ (k2\_zfmisc\_1\ X0\ X0)\ X0) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0)\ X0))))) \Rightarrow ((X0 \in X1) \Rightarrow (X2 \in X1))) \wedge (\forall X2.((v1\_funct\_1\ X2) \wedge ((v1\_funct\_2\ X2\ X0\ X0) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0))))) \Rightarrow ((X0 \in X1) \Rightarrow (X2 \in X1))))) \tag{4}$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0)\wedge(v1\_classes2\ X0))\Rightarrow(u1\_struct\_0\ k18\_mod\_2\in X0) \tag{5}$$

Assume the following.

$$(\neg v2\_struct\_0\ k18\_mod\_2)\wedge(v36\_algstr\_0\ k18\_mod\_2) \tag{6}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l1\_struct\_0\ X0))\Rightarrow(\neg v1\_xboole\_0\ (u1\_struct\_0\ X0)) \tag{7}$$

Assume the following.

$$\forall X0.(l3\_algstr\_0\ X0)\Rightarrow((v1\_funct\_1\ (u2\_algstr\_0\ X0))\wedge((v1\_funct\_2\ (u2\_algstr\_0\ X0)\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))\ (u1\_struct\_0\ X0))\wedge(m1\_subset\_1\ (u2\_algstr\_0\ X0)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))\ (u1\_struct\_0\ X0)))))) \tag{8}$$

Assume the following.

$$\forall X0.(l1\_algstr\_0\ X0)\Rightarrow((v1\_funct\_1\ (u1\_algstr\_0\ X0))\wedge((v1\_funct\_2\ (u1\_algstr\_0\ X0)\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))\ (u1\_struct\_0\ X0))\wedge(m1\_subset\_1\ (u1\_algstr\_0\ X0)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))\ (u1\_struct\_0\ X0)))))) \tag{9}$$

Assume the following.

$$\forall X0.(l6\_algstr\_0\ X0)\Rightarrow((l2\_algstr\_0\ X0)\wedge(l5\_algstr\_0\ X0)) \tag{10}$$

Assume the following.

$$\forall X0.(l5\_algstr\_0\ X0)\Rightarrow((l4\_algstr\_0\ X0)\wedge(l4\_struct\_0\ X0)) \tag{11}$$

Assume the following.

$$\forall X0.(l4\_algstr\_0\ X0)\Rightarrow((l3\_struct\_0\ X0)\wedge(l3\_algstr\_0\ X0)) \tag{12}$$

Assume the following.

$$\forall X0.(l2\_struct\_0\ X0)\Rightarrow(l1\_struct\_0\ X0) \tag{13}$$

Assume the following.

$$\forall X0.(l2\_algstr\_0\ X0)\Rightarrow((l2\_struct\_0\ X0)\wedge(l1\_algstr\_0\ X0)) \tag{14}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l2\_algstr\_0\ X0))\Rightarrow((v1\_funct\_1\ (k5\_vectsp\_1\ X0))\wedge((v1\_funct\_2\ (k5\_vectsp\_1\ X0)\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))\wedge(m1\_subset\_1\ (k5\_vectsp\_1\ X0)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))))))) \tag{15}$$

Assume the following.

$$\forall X0.(l3\_struct\_0\ X0)\Rightarrow(m1\_subset\_1\ (k5\_struct\_0\ X0)\ (u1\_struct\_0\ X0)) \tag{16}$$

Assume the following.

$$\forall X0.(l2\_struct\_0\ X0)\Rightarrow(m1\_subset\_1\ (k4\_struct\_0\ X0)\ (u1\_struct\_0\ X0)) \tag{17}$$

Assume the following.

$$(v36\_algstr\_0\ k18\_mod\_2)\wedge(l6\_algstr\_0\ k18\_mod\_2) \tag{18}$$

Assume the following.

$$\forall X0.(v1\_classes2\ X0)\Rightarrow((v1\_ordinal1\ X0)\wedge(v2\_classes1\ X0)) \tag{19}$$

Theorem 1

$$\forall X0.((\neg v1\_xboole\_0\ X0)\wedge(v1\_classes2\ X0))\Rightarrow((u1\_struct\_0\ k18\_mod\_2\in X0)\wedge((u1\_algstr\_0\ k18\_mod\_2\in X0)\wedge((k5\_vectsp\_1\ k18\_mod\_2\in X0)\wedge((k4\_struct\_0\ k18\_mod\_2\in X0)\wedge((u2\_algstr\_0\ k18\_mod\_2\in X0)\wedge(k5\_struct\_0\ k18\_mod\_2\in X0))))))$$