t29_cfuncdom (TMLEybyCDGgyuJZKKJD-pLfiL4pEzSLoDcCw)

October 27, 2020

Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k5\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k8\_cfuncdom : \iota \Rightarrow \iota$ be given. Let $k5\_cfuncdom : \iota \Rightarrow \iota$ 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 $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_numbers : \iota$ be given. Let $g1\_cfuncdom : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_group\_1 : \iota \Rightarrow o$ be given. Let $v1\_cfuncdom : \iota \Rightarrow o$ be given. Let $l3\_struct\_0 : \iota \Rightarrow o$ be given. Let $u3\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $l2\_struct\_0 : \iota \Rightarrow o$ be given. Let $u2\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $l3\_algstr\_0 : \iota \Rightarrow o$ be given. Let $u2\_algstr\_0 : \iota \Rightarrow \iota$ be given. Let $l1\_clvect\_1 : \iota \Rightarrow o$ be given. Let $u1\_clvect\_1 : \iota \Rightarrow \iota$ be given. Let $l1\_algstr\_0 : \iota \Rightarrow o$ be given. Let $u1\_algstr\_0 : \iota \Rightarrow \iota$ 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 $l1\_cfuncdom : \iota \Rightarrow o$ be given. Let $k9\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_cfuncdom : \iota \Rightarrow \iota$ be given. Let $k1\_cfuncdom : \iota \Rightarrow \iota$ be given. Let $k3\_cfuncdom : \iota \Rightarrow \iota$ be given. Let $k4\_cfuncdom : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5.$$
$$(((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ (k2\_zfmisc\_1\ X0\ X0)\ X0)\wedge(m1\_subset\_1$$
$$X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0)\ X0)))))\wedge(((v1\_funct\_1$$
$$X2)\wedge((v1\_funct\_2\ X2\ (k2\_zfmisc\_1\ X0\ X0)\ X0)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1$$
$$(k2\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0)\ X0)))))\wedge(((v1\_funct\_1\ X3)\wedge($$
$$(v1\_funct\_2\ X3\ (k2\_zfmisc\_1\ k2\_numbers\ X0)\ X0)\wedge(m1\_subset\_1\ X3$$
$$(k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ k2\_numbers\ X0)\ X0)))))\wedge$$
$$((m1\_subset\_1\ X4\ X0)\wedge(m1\_subset\_1\ X5\ X0)))))\Rightarrow(\forall X6.\forall X7.$$
$$\forall X8.\forall X9.\forall X10.\forall X11.(g1\_cfuncdom\ X0$$
$$X1\ X2\ X3\ X4\ X5 = g1\_cfuncdom\ X6\ X7\ X8\ X9\ X10\ X11)\Rightarrow((X0 = X6)\wedge((X1 = X7)\wedge$$
$$((X2 = X8)\wedge((X3 = X9)\wedge((X4 = X10)\wedge(X5 = X11)))))) \tag{1}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow((v1\_group\_1\ (k8\_cfuncdom\ X0))\wedge$$
$$(v1\_cfuncdom\ (k8\_cfuncdom\ X0))) \tag{2}$$

Assume the following.

$$\forall X0.(l3\_struct\_0\ X0) \Rightarrow (m1\_subset\_1\ (u3\_struct\_0\ X0)\ (u1\_struct\_0\ X0)) \tag{3}$$

Assume the following.

$$\forall X0.(l2\_struct\_0\ X0) \Rightarrow (m1\_subset\_1\ (u2\_struct\_0\ X0)\ (u1\_struct\_0\ X0)) \tag{4}$$

Assume the following.

$$\forall X0.(l3\_algstr\_0\ X0) \Rightarrow ((v1\_funct\_1\ (u2\_algstr\_0\ X0)) \wedge ((v1\_funct\_2\ (u2\_algstr\_0\ X0)\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))\ (u1\_struct\_0\ X0)) \wedge (m1\_subset\_1\ (u2\_algstr\_0\ X0)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))\ (u1\_struct\_0\ X0)))))) \tag{5}$$

Assume the following.

$$\forall X0.(l1\_clvect\_1\ X0) \Rightarrow ((v1\_funct\_1\ (u1\_clvect\_1\ X0)) \wedge ((v1\_funct\_2\ (u1\_clvect\_1\ X0)\ (k2\_zfmisc\_1\ k2\_numbers\ (u1\_struct\_0\ X0))\ (u1\_struct\_0\ X0)) \wedge (m1\_subset\_1\ (u1\_clvect\_1\ X0)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ k2\_numbers\ (u1\_struct\_0\ X0))\ (u1\_struct\_0\ X0)))))) \tag{6}$$

Assume the following.

$$\forall X0.(l1\_algstr\_0\ X0) \Rightarrow ((v1\_funct\_1\ (u1\_algstr\_0\ X0)) \wedge ((v1\_funct\_2\ (u1\_algstr\_0\ X0)\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))\ (u1\_struct\_0\ X0)) \wedge (m1\_subset\_1\ (u1\_algstr\_0\ X0)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))\ (u1\_struct\_0\ X0)))))) \tag{7}$$

Assume the following.

$$\forall X0.(l6\_algstr\_0\ X0) \Rightarrow ((l2\_algstr\_0\ X0) \wedge (l5\_algstr\_0\ X0)) \tag{8}$$

Assume the following.

$$\forall X0.(l5\_algstr\_0\ X0) \Rightarrow ((l4\_algstr\_0\ X0) \wedge (l4\_struct\_0\ X0)) \tag{9}$$

Assume the following.

$$\forall X0.(l4\_algstr\_0\ X0) \Rightarrow ((l3\_struct\_0\ X0) \wedge (l3\_algstr\_0\ X0)) \tag{10}$$

Assume the following.

$$\forall X0.(l2\_algstr\_0\ X0) \Rightarrow ((l2\_struct\_0\ X0) \wedge (l1\_algstr\_0\ X0)) \tag{11}$$

Assume the following.

$$\forall X0.(l1\_cfuncdom\ X0) \Rightarrow ((l6\_algstr\_0\ X0) \wedge (l1\_clvect\_1\ X0)) \tag{12}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow ((v1\_cfuncdom\ (k8\_cfuncdom\ X0)) \wedge (l1\_cfuncdom\ (k8\_cfuncdom\ X0))) \tag{13}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (k8\_cfuncdom\ X0 = g1\_cfuncdom\ (k9\_funct\_2\ X0\ k2\_numbers)\ (k2\_cfuncdom\ X0)\ (k1\_cfuncdom\ X0)\ (k3\_cfuncdom\ X0)\ (k5\_cfuncdom\ X0)\ (k4\_cfuncdom\ X0)) \tag{14}$$

Assume the following.

$$\forall X0.(l3\_struct\_0\ X0) \Rightarrow (k5\_struct\_0\ X0 = u3\_struct\_0\ X0) \tag{15}$$

Assume the following.

$$\forall X0.(l1\_cfuncdom\ X0) \Rightarrow ((v1\_cfuncdom\ X0) \Rightarrow (X0 = g1\_cfuncdom\ (u1\_struct\_0\ X0)\ (u2\_algstr\_0\ X0)\ (u1\_algstr\_0\ X0)\ (u1\_clvect\_1\ X0)\ (u3\_struct\_0\ X0)\ (u2\_struct\_0\ X0))) \tag{16}$$

Theorem 1

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (k5\_struct\_0\ (k8\_cfuncdom\ X0) = k5\_cfuncdom\ X0)$$