t3_zmodul01 (TMGpZ1XyQYJqzZPCo68Cmc2sskdZNF8GcvM)

October 27, 2020

Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v13\_algstr\_0 : \iota \Rightarrow o$ be given. Let $v2\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v3\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v4\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v2\_zmodul01 : \iota \Rightarrow o$ be given. Let $v3\_zmodul01 : \iota \Rightarrow o$ be given. Let $v4\_zmodul01 : \iota \Rightarrow o$ be given. Let $v5\_zmodul01 : \iota \Rightarrow o$ be given. Let $l1\_zmodul01 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $v6\_zmodul01 : \iota \Rightarrow o$ be given. Let $k4\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $l2\_algstr\_0 : \iota \Rightarrow o$ be given. Let $k1\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $np\_\_1 : \iota$ be given. Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $k5\_numbers : \iota$ be given. Let $np\_\_0 : \iota$ be given. Let $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $v1\_int\_1 : \iota \Rightarrow o$ be given. Let $k1\_zmodul01 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Rightarrow (X0 = k1\_xboole\_0) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v13\_algstr\_0\ X0) \wedge ((v3\_rlvect\_1\ X0) \wedge ((v4\_rlvect\_1\ X0) \wedge (l2\_algstr\_0\ X0))))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow ((k1\_algstr\_0\ X0\ X1\ (k4\_algstr\_0\ X0\ X1) = k4\_struct\_0\ X0) \wedge (k1\_algstr\_0\ X0\ (k4\_algstr\_0\ X0\ X1)\ X1 = k4\_struct\_0\ X0))) \tag{2}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_1) \wedge (m2\_subset\_1\ np\_\_1\ k1\_numbers\ k5\_numbers)) \wedge ((m1\_subset\_1\ np\_\_1\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_1\ k1\_numbers)) \tag{3}$$

Assume the following.

$$v1\_xboole\_0\ np\_\_0 \tag{4}$$

Assume the following.

$$k2\_xcmplx\_0\ np\_\_1\ np\_\_1 = np\_\_2 \tag{5}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{6}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_int\_1\ X0)\wedge(v1\_int\_1\ X1))\Rightarrow(v1\_int\_1\ (k2\_xcmplx\_0\ X0\ X1)) \tag{8}$$

Assume the following.

$$\forall X0.(l1\_zmodul01\ X0)\Rightarrow(l2\_algstr\_0\ X0) \tag{9}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l1\_zmodul01\ X0))\Rightarrow((v6\_zmodul01\ X0)\Leftrightarrow(\forall X1.(v1\_int\_1\ X1)\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))\Rightarrow(\neg(k1\_zmodul01\ X0\ X2\ X1 = k4\_struct\_0\ X0)\wedge((X1\neq k6\_numbers)\wedge(X2\neq k4\_struct\_0\ X0))))))) \tag{10}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l1\_zmodul01\ X0))\Rightarrow((v5\_zmodul01\ X0)\Leftrightarrow(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow(k1\_zmodul01\ X0\ X1\ np\_\_1 = X1))) \tag{11}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l1\_zmodul01\ X0))\Rightarrow((v3\_zmodul01\ X0)\Leftrightarrow(\forall X1.(v1\_int\_1\ X1)\Rightarrow(\forall X2.(v1\_int\_1\ X2)\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0))\Rightarrow(k1\_zmodul01\ X0\ X3\ (k2\_xcmplx\_0\ X1\ X2) = k1\_algstr\_0\ X0\ (k1\_zmodul01\ X0\ X3\ X1)\ (k1\_zmodul01\ X0\ X3\ X2)))))) \tag{12}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1)\Rightarrow(v7\_ordinal1\ X0) \tag{13}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(v1\_int\_1\ X0) \tag{14}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v13\_algstr\_0\ X0)\wedge((v2\_rlvect\_1\ X0)\wedge((v3\_rlvect\_1\ X0)\wedge((v4\_rlvect\_1\ X0)\wedge((v2\_zmodul01\ X0)\wedge((v3\_zmodul01\ X0)\wedge((v4\_zmodul01\ X0)\wedge((v5\_zmodul01\ X0)\wedge(l1\_zmodul01\ X0))))))))))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow(((v6\_zmodul01\ X0)\wedge(X1 = k4\_algstr\_0\ X0\ X1))\Rightarrow(X1 = k4\_struct\_0\ X0)))$$