l23_polynom7 (TMEugK22zCuKvCMKwzQVZEYWMfCx718iju2)

October 27, 2020

Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $l2\_struct\_0 : \iota \Rightarrow o$ 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 $k15\_pre\_poly : \iota \Rightarrow \iota$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $v4\_polynom7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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 $k2\_polynom7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16\_pre\_poly : \iota \Rightarrow \iota$ be given. Let $k3\_polynom7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_polynom1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3\_polynom7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4\_valued\_0 : \iota \Rightarrow o$ be given. Let $v2\_pre\_poly : \iota \Rightarrow o$ be given. Let $k4\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k2\_polynom1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v2\_struct\_0\ X1)\wedge(l2\_struct\_0\ X1))\wedge((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ (k15\_pre\_poly\ X0)\ (u1\_struct\_0\ X1))\wedge((v3\_polynom7\ X2\ X0\ X1)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k15\_pre\_poly\ X0)\ (u1\_struct\_0\ X1))))))))\Rightarrow((v1\_relat\_1\ (k2\_polynom7\ X0\ X1\ X2))\wedge((v4\_relat\_1\ (k2\_polynom7\ X0\ X1\ X2)\ X0)\wedge((v1\_funct\_1\ (k2\_polynom7\ X0\ X1\ X2))\wedge((v1\_partfun1\ (k2\_polynom7\ X0\ X1\ X2)\ X0)\wedge((v4\_valued\_0\ (k2\_polynom7\ X0\ X1\ X2))\wedge(v2\_pre\_poly\ (k2\_polynom7\ X0\ X1\ X2)))))))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v2\_struct\_0\ X1)\wedge(l2\_struct\_0\ X1))\Rightarrow(\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ (k15\_pre\_poly\ X0)\ (u1\_struct\_0\ X1))\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k15\_pre\_poly\ X0)\ (u1\_struct\_0\ X1)))))))\Rightarrow((v4\_polynom7\ X2\ X0\ X1)\Leftrightarrow(\forall X3.((v1\_relat\_1\ X3)\wedge((v4\_relat\_1\ X3\ X0)\wedge((v1\_funct\_1\ X3)\wedge((v1\_partfun1\ X3\ X0)\wedge((v4\_valued\_0\ X3)\wedge(v2\_pre\_poly\ X3)))))))\Rightarrow((X3\neq k16\_pre\_poly\ X0)\Rightarrow(k3\_polynom1\ X0\ X1\ X2\ X3 = k4\_struct\_0\ X1))))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v2\_struct\_0\ X1)\wedge(l2\_struct\_0\ X1))\Rightarrow (\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ (k15\_pre\_poly\ X0)\ (u1\_struct\_0\ X1))\wedge((v3\_polynom7\ X2\ X0\ X1)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k15\_pre\_poly\ X0)\ (u1\_struct\_0\ X1)))))))\Rightarrow(k3\_polynom7\ X0\ X1\ X2 = k3\_polynom1\ X0\ X1\ X2\ (k2\_polynom7\ X0\ X1\ X2))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v2\_struct\_0\ X1)\wedge(l2\_struct\_0\ X1))\Rightarrow (\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ (k15\_pre\_poly\ X0)\ (u1\_struct\_0\ X1))\wedge((v3\_polynom7\ X2\ X0\ X1)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k15\_pre\_poly\ X0)\ (u1\_struct\_0\ X1)))))))\Rightarrow(\forall X3.((v1\_relat\_1\ X3)\wedge((v4\_relat\_1\ X3\ X0)\wedge((v1\_funct\_1\ X3)\wedge((v1\_partfun1\ X3\ X0)\wedge((v4\_valued\_0\ X3)\wedge(v2\_pre\_poly\ X3))))))\Rightarrow((X3 = k2\_polynom7\ X0\ X1\ X2)\Leftrightarrow(\neg(k3\_polynom1\ X0\ X1\ X2\ X3 = k4\_struct\_0\ X1)\wedge(\neg(k2\_polynom1\ (k15\_pre\_poly\ X0)\ X1\ X2 = k1\_xboole\_0)\wedge(X3 = k16\_pre\_poly\ X0)))))) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v2\_struct\_0\ X1)\wedge(l2\_struct\_0\ X1))\Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k15\_pre\_poly\ X0)\ (u1\_struct\_0\ X1))))\Rightarrow(((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ (k15\_pre\_poly\ X0)\ (u1\_struct\_0\ X1))\wedge(v4\_polynom7\ X2\ X0\ X1)))\Rightarrow((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ (k15\_pre\_poly\ X0)\ (u1\_struct\_0\ X1))\wedge(v3\_polynom7\ X2\ X0\ X1))))) \tag{5}$$

Theorem 1

$$\forall X0.\forall X1.((\neg v2\_struct\_0\ X1)\wedge(l2\_struct\_0\ X1))\Rightarrow (\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ (k15\_pre\_poly\ X0)\ (u1\_struct\_0\ X1))\wedge((v4\_polynom7\ X2\ X0\ X1)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k15\_pre\_poly\ X0)\ (u1\_struct\_0\ X1)))))))\Rightarrow((k2\_polynom7\ X0\ X1\ X2 = k16\_pre\_poly\ X0)\wedge(k3\_polynom7\ X0\ X1\ X2 = k3\_polynom1\ X0\ X1\ X2\ (k16\_pre\_poly\ X0))))$$