

t20\_polynom7  
(TMMFcnk1xKrb9NEDaTgr5ecvV3Vz5KaZ18L)

October 27, 2020

Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v4\_vectsp\_1 : \iota \Rightarrow o$  be given. Let  $l5\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $r2\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k15\_pre\_poly : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k4\_polynom7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k8\_polynom1 : \iota \Rightarrow \iota \Rightarrow \iota$  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  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $l4\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $l4\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l3\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l3\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $v3\_vectsp\_1 : \iota \Rightarrow o$  be given. Let  $k15\_funct\_7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_polynom1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k16\_pre\_poly : \iota \Rightarrow \iota$  be given. Let  $v6\_vectsp\_1 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (((v1\_funct\_1 X2) \wedge \\ & ((v1\_funct\_2 X2 X0 X1) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & X0 X1)))))) \wedge ((v1\_funct\_1 X3) \wedge ((v1\_funct\_2 X3 X0 X1) \wedge (m1\_subset\_1 \\ & X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))))) \Rightarrow ((r2\_funct\_2 X0 X1 X2 \\ & X3) \Leftrightarrow (X2 = X3)) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. (l5\_algstr\_0 X0) \Rightarrow ((l4\_algstr\_0 X0) \wedge (l4\_struct\_0 X0)) \tag{2}$$

Assume the following.

$$\forall X0. (l4\_struct\_0 X0) \Rightarrow ((l2\_struct\_0 X0) \wedge (l3\_struct\_0 X0)) \tag{3}$$

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$$\forall X0. (l4\_algstr\_0 X0) \Rightarrow ((l3\_struct\_0 X0) \wedge (l3\_algstr\_0 X0)) \tag{4}$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((\neg v2\_struct\_0 X1)\wedge((v3\_vectsp\_1 X1)\wedge \\ (l5\_algstr\_0 X1)))\Rightarrow((v1\_funct\_1 (k8\_polynom1 X0 X1))\wedge((v1\_funct\_2 \\ (k8\_polynom1 X0 X1) (k15\_pre\_poly X0) (u1\_struct\_0 X1))\wedge(m1\_subset\_1 \\ (k8\_polynom1 X0 X1) (k1\_zfmisc\_1 (k2\_zfmisc\_1 (k15\_pre\_poly X0) \\ (u1\_struct\_0 X1)))))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.(l3\_struct\_0 X0)\Rightarrow(m1\_subset\_1 (k5\_struct\_0 X0) (u1\_struct\_0 X0)) \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((\neg v2\_struct\_0 X1)\wedge(l2\_struct\_0 X1))\Rightarrow \\ (\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 X1))\Rightarrow(k4\_polynom7 X0 \\ X1 X2 = k15\_funct\_7 (k15\_pre\_poly X0) (u1\_struct\_0 X1) (k7\_polynom1 \\ X0 X1) (k16\_pre\_poly X0) X2)) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((\neg v2\_struct\_0 X1)\wedge((v3\_vectsp\_1 X1)\wedge \\ (l5\_algstr\_0 X1)))\Rightarrow(k8\_polynom1 X0 X1 = k15\_funct\_7 (k15\_pre\_poly \\ X0) (u1\_struct\_0 X1) (k7\_polynom1 X0 X1) (k16\_pre\_poly X0) (k5\_struct\_0 \\ X1)) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.(l4\_algstr\_0 X0)\Rightarrow(((\neg v2\_struct\_0 X0)\wedge(v4\_vectsp\_1 X0))\Rightarrow((\neg v2\_struct\_0 X0)\wedge((v3\_vectsp\_1 X0)\wedge(v6\_vectsp\_1 X0)))) \quad (9)$$

**Theorem 1**

$$\begin{aligned} \forall X0.\forall X1.((\neg v2\_struct\_0 X1)\wedge((v4\_vectsp\_1 X1)\wedge \\ (l5\_algstr\_0 X1)))\Rightarrow(r2\_funct\_2 (k15\_pre\_poly X0) (u1\_struct\_0 \\ X1) (k4\_polynom7 X0 X1 (k5\_struct\_0 X1)) (k8\_polynom1 X0 X1)) \end{aligned}$$