

## t54\_polynom5

(TMXbt2fgwVFYXLKUd8Vs2dEg42WKPN9AEyr)

October 27, 2020

Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v1\_group\_1 : \iota \Rightarrow o$  be given. Let  $l6\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $v1\_polynom5 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k9\_polynom3 : \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k2\_polynom4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_struct\_0 : \iota \Rightarrow \iota$  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  $k5\_numbers : \iota$  be given. Let  $v1\_algseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u2\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $l2\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $l5\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $l1\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_polynom5 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2\_struct\_0 X0) \wedge ((v1\_group\_1 X0) \wedge (l6\_algstr\_0 \\ &X0))) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (k2\_polynom4 \\ &X0 (k9\_polynom3 X0) X1 = k4\_struct\_0 X0)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2\_struct\_0 X0) \wedge (l2\_struct\_0 X0)) \Rightarrow ((v1\_funct\_1 \\ &(k9\_polynom3 X0)) \wedge ((v1\_funct\_2 (k9\_polynom3 X0) k5\_numbers ( \\ &u1\_struct\_0 X0)) \wedge (v1\_algseq\_1 (k9\_polynom3 X0) X0))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. (l2\_struct\_0 X0) \Rightarrow (m1\_subset\_1 (u2\_struct\_0 X0) (u1\_struct\_0 X0)) \quad (3)$$

Assume the following.

$$\forall X0. (l6\_algstr\_0 X0) \Rightarrow ((l2\_algstr\_0 X0) \wedge (l5\_algstr\_0 X0)) \quad (4)$$

Assume the following.

$$\forall X0. (l2\_algstr\_0 X0) \Rightarrow ((l2\_struct\_0 X0) \wedge (l1\_algstr\_0 X0)) \quad (5)$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0 X0) \wedge (l2\_struct\_0 X0)) \Rightarrow ((v1\_funct\_1 (k9\_polynom3 X0)) \wedge ((v1\_funct\_2 (k9\_polynom3 X0) k5\_numbers (u1\_struct\_0 X0)) \wedge (m1\_subset\_1 (k9\_polynom3 X0) (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers (u1\_struct\_0 X0)))))) \quad (6)$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0 X0) \wedge ((v1\_group\_1 X0) \wedge (l6\_algstr\_0 X0))) \Rightarrow (\forall X1.((v1\_funct\_1 X1) \wedge ((v1\_funct\_2 X1 k5\_numbers (u1\_struct\_0 X0)) \wedge ((v1\_algseq\_1 X1 X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers (u1\_struct\_0 X0))))))) \Rightarrow ((v1\_polynom5 X1 X0) \Leftrightarrow (\exists X2.(m1\_subset\_1 X2 (u1\_struct\_0 X0)) \wedge (r1\_polynom5 X0 X1 X2)))) \quad (7)$$

Assume the following.

$$\forall X0.(l2\_struct\_0 X0) \Rightarrow (k4\_struct\_0 X0 = u2\_struct\_0 X0) \quad (8)$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0 X0) \wedge ((v1\_group\_1 X0) \wedge (l6\_algstr\_0 X0))) \Rightarrow (\forall X1.((v1\_funct\_1 X1) \wedge ((v1\_funct\_2 X1 k5\_numbers (u1\_struct\_0 X0)) \wedge ((v1\_algseq\_1 X1 X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers (u1\_struct\_0 X0))))))) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow ((r1\_polynom5 X0 X1 X2) \Leftrightarrow (k2\_polynom4 X0 X1 X2 = k4\_struct\_0 X0)))) \quad (9)$$

**Theorem 1**

$$\forall X0.((\neg v2\_struct\_0 X0) \wedge ((v1\_group\_1 X0) \wedge (l6\_algstr\_0 X0))) \Rightarrow (v1\_polynom5 (k9\_polynom3 X0) X0)$$