

# l35\_polyred

(TMEvMs1KLTpEajV8oinVTkYXv3vujjE1tftp)

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Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k15\_pre\_poly : \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_2 : \iota \Rightarrow o$  be given. Let  $v4\_relat\_2 : \iota \Rightarrow o$  be given. Let  $v6\_relat\_2 : \iota \Rightarrow o$  be given. Let  $v8\_relat\_2 : \iota \Rightarrow o$  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  $v2\_struct\_0 : \iota \Rightarrow o$  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  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $v1\_polynom1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_polynom1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_finsub\_1 : \iota \Rightarrow \iota$  be given. Let  $g1\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k14\_pre\_poly : \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v4\_finsub\_1 : \iota \Rightarrow o$  be given. Let  $v1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $l1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $u1\_orders\_2 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X0 (k1\_zfmisc\_1 X1)) \Leftrightarrow (r1\_tarski X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. k15\_pre\_poly X0 = k14\_pre\_poly X0 \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X0))) \Rightarrow (\forall X2. \forall X3. (g1\_orders\_2 X0 X1 = g1\_orders\_2 X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \quad (3)$$

Assume the following.

$$\forall X0. \neg v1\_xboole\_0 (k14\_pre\_poly X0) \quad (4)$$

Assume the following.

$$\forall X0. v4\_finsub\_1 (k5\_finsub\_1 X0) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1\_xboole\_0 X0)\wedge((l2\_struct\_0 X1)\wedge((v1\_funct\_1 X2)\wedge((v1\_funct\_2 X2 X0 (u1\_struct\_0 X1))\wedge(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 (u1\_struct\_0 X1))))))))\Rightarrow(m1\_subset\_1 (k2\_polynom1 X0 X1 X2) (k1\_zfmisc\_1 X0)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X0))\Rightarrow((v1\_orders\_2 (g1\_orders\_2 X0 X1))\wedge(l1\_orders\_2 (g1\_orders\_2 X0 X1))) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(v4\_finsub\_1 X1)\Rightarrow((X1 = k5\_finsub\_1 X0)\Leftrightarrow(\forall X2.(X2 \in X1)\Leftrightarrow((r1\_tarski X2 X0)\wedge(v1\_finset\_1 X2)))) \quad (8)$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0 X0)\Rightarrow(\forall X1.(l2\_struct\_0 X1)\Rightarrow(\forall X2.((v1\_funct\_1 X2)\wedge((v1\_funct\_2 X2 X0 (u1\_struct\_0 X1))\wedge(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 (u1\_struct\_0 X1))))))))\Rightarrow((v1\_polynom1 X2 X0 X1)\Leftrightarrow(v1\_finset\_1 (k2\_polynom1 X0 X1 X2)))) \quad (9)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0)\Rightarrow((v1\_orders\_2 X0)\Rightarrow(X0 = g1\_orders\_2 (u1\_struct\_0 X0) (u1\_orders\_2 X0))) \quad (10)$$

### Theorem 1

$$\forall X0.(v3\_ordinal1 X0)\Rightarrow(\forall X1.((v1\_partfun1 X1 (k15\_pre\_poly X0))\wedge((v1\_relat\_2 X1)\wedge((v4\_relat\_2 X1)\wedge((v6\_relat\_2 X1)\wedge((v8\_relat\_2 X1)\wedge(m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (k15\_pre\_poly X0) (k15\_pre\_poly X0))))))))\Rightarrow(\forall X2.((\neg v2\_struct\_0 X2)\wedge(l2\_struct\_0 X2))\Rightarrow(\forall X3.((v1\_funct\_1 X3)\wedge((v1\_funct\_2 X3 (k15\_pre\_poly X0) (u1\_struct\_0 X2))\wedge((v1\_polynom1 X3 (k15\_pre\_poly X0) X2)\wedge(m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (k15\_pre\_poly X0) (u1\_struct\_0 X2))))))))\Rightarrow(k2\_polynom1 (k15\_pre\_poly X0) X2 X3 \in k5\_finsub\_1 (u1\_struct\_0 (g1\_orders\_2 (k15\_pre\_poly X0) X1))))))$$