

# t71\_polyform

(TML8Y3fC1vaaC4MsdmpDsY2pDBKtjJUUnpJa)

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Let  $v2\_polyform : \iota \Rightarrow o$  be given. Let  $v3\_polyform : \iota \Rightarrow o$  be given. Let  $v4\_polyform : \iota \Rightarrow o$  be given. Let  $l1\_polyform : \iota \Rightarrow o$  be given. Let  $k15\_polyform : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_polyform : \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v3\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finseq\_1 : \iota \Rightarrow o$  be given. Let  $k9\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k3\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k11\_polyform : \iota \Rightarrow \iota \Rightarrow \iota$  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  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_xcmplx\_0 : \iota \Rightarrow \iota$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v1\_int\_1 : \iota \Rightarrow o$  be given. Let  $k3\_polyform : \iota \Rightarrow \iota$  be given. Let  $k1\_card\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $v1\_card\_1 : \iota \Rightarrow o$  be given. Let  $v2\_valued\_0 : \iota \Rightarrow o$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $u1\_polyform : \iota \Rightarrow \iota$  be given. Let  $v1\_pre\_poly : \iota \Rightarrow o$  be given. Let  $k4\_numbers : \iota$  be given. Let  $k10\_polyform : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_pre\_poly : \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v3\_valued\_0 : \iota \Rightarrow o$  be given. Let  $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (\neg(\neg r1\_xxreal\_0 X0 X1) \wedge ((\neg v3\_xxreal\_0 X1) \wedge (\neg v2\_xxreal\_0 X0)))) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1 X1) \wedge ((v1\_funct\_1 X1) \wedge (v1\_finseq\_1 X1))) \Rightarrow ((X1 = k9\_finseq\_1 X0) \Leftrightarrow ((k3\_finseq\_1 X1 = np\_1) \wedge (k1\_funct\_1 X1 np\_1 = X0))) \quad (2)$$

Assume the following.

$$\forall X0.((v2\_polyform\ X0)\wedge((v3\_polyform\ X0)\wedge((v4\_polyform\ X0)\wedge(l1\_polyform\ X0))))\Rightarrow(k11\_polyform\ X0\ (k7\_polyform\ X0) = np\_1) \quad (3)$$

Assume the following.

$$((v2\_xxreal\_0\ np\_1)\wedge(m2\_subset\_1\ np\_1\ k1\_numbers\ k5\_numbers))\wedge((m1\_subset\_1\ np\_1\ k5\_numbers)\wedge(m1\_subset\_1\ np\_1\ k1\_numbers)) \quad (4)$$

Assume the following.

$$k4\_xcmplx\_0\ (k4\_xcmplx\_0\ np\_1) = np\_1 \quad (5)$$

Assume the following.

$$r1\_xxreal\_0\ np\_1\ np\_1 \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0\ X0)\wedge(v1\_xxreal\_0\ X1))\Rightarrow(r1\_xxreal\_0\ X0\ X0) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0)\Leftrightarrow(m1\_finseq\_1\ X1\ X0) \quad (8)$$

Assume the following.

$$\forall X0.k9\_finseq\_1\ X0 = k5\_finseq\_1\ X0 \quad (9)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (10)$$

Assume the following.

$$\forall X0.(v1\_int\_1\ X0)\Rightarrow(k3\_polyform\ X0 = k5\_finseq\_1\ X0) \quad (11)$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_finseq\_1\ X0)))\Rightarrow(k3\_finseq\_1\ X0 = k1\_card\_1\ X0) \quad (12)$$

Assume the following.

$$\forall X0.v1\_finseq\_1\ (k5\_finseq\_1\ X0) \quad (13)$$

Assume the following.

$$\forall X0.(v1\_finset\_1\ X0)\Rightarrow((v1\_finset\_1\ (k1\_card\_1\ X0))\wedge(v1\_card\_1\ (k1\_card\_1\ X0))) \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1 X0)\wedge((v1\_funct\_1 X0)\wedge(v2\_valued\_0 X0)))\Rightarrow(v1\_xreal\_0 (k1\_funct\_1 X0 X1)) \quad (15)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0)\Rightarrow((v1\_xcmplx\_0 (k4\_xcmplx\_0 X0))\wedge(v1\_xreal\_0 (k4\_xcmplx\_0 X0))) \quad (16)$$

Assume the following.

$$\forall X0.((\neg v3\_xreal\_0 X0)\wedge(v1\_xreal\_0 X0))\Rightarrow((v1\_xcmplx\_0 (k4\_xcmplx\_0 X0))\wedge(\neg v2\_xreal\_0 (k4\_xcmplx\_0 X0))) \quad (17)$$

Assume the following.

$$\forall X0.(l1\_polyform X0)\Rightarrow((v1\_relat\_1 (u1\_polyform X0))\wedge((v1\_funct\_1 (u1\_polyform X0))\wedge((v1\_finseq\_1 (u1\_polyform X0))\wedge(v1\_pre\_poly (u1\_polyform X0)))))) \quad (18)$$

Assume the following.

$$\forall X0.(v1\_relat\_1 (k9\_finseq\_1 X0))\wedge(v1\_funct\_1 (k9\_finseq\_1 X0)) \quad (19)$$

Assume the following.

$$\forall X0.(v1\_int\_1 X0)\Rightarrow(m2\_finseq\_1 (k3\_polyform X0) k4\_numbers) \quad (20)$$

Assume the following.

$$\forall X0.v1\_card\_1 (k1\_card\_1 X0) \quad (21)$$

Assume the following.

$$\begin{aligned} \forall X0.((v2\_polyform X0)\wedge((v3\_polyform X0)\wedge((v4\_polyform X0)\wedge(l1\_polyform X0))))\Rightarrow(\forall X1.(v1\_int\_1 X1)\Rightarrow(\forall X2. \\ ((v1\_relat\_1 X2)\wedge((v1\_funct\_1 X2)\wedge(v1\_finseq\_1 X2))))\Rightarrow((X2 = k10\_polyform X0 X1)\Leftrightarrow(((\neg r1\_xreal\_0 (k4\_xcmplx\_0 np\_1) X1)\Rightarrow \\ (X2 = k2\_pre\_poly k1\_xboole\_0))\wedge(((X1 = k4\_xcmplx\_0 np\_1)\Rightarrow(X2 = k3\_polyform k1\_xboole\_0))\wedge(\neg(\neg r1\_xreal\_0 X1 (k4\_xcmplx\_0 np\_1)))\wedge(\neg r1\_xreal\_0 (k7\_polyform X0) X1)\wedge(X2\neq k1\_funct\_1 (u1\_polyform X0) (k2\_xcmplx\_0 X1 np\_1))))\wedge(((X1 = k7\_polyform X0)\Rightarrow(X2 = k9\_finseq\_1 X0))\wedge(\neg r1\_xreal\_0 X1 (k7\_polyform X0))\Rightarrow(X2 = k2\_pre\_poly k1\_xboole\_0)))))) \quad (22) \end{aligned}$$

Assume the following.

$$\forall X0.((v2\_polyform X0)\wedge((v3\_polyform X0)\wedge((v4\_polyform X0)\wedge(l1\_polyform X0))))\Rightarrow(k7\_polyform X0 = k3\_finseq\_1 (u1\_polyform X0)) \quad (23)$$

Assume the following.

$$\begin{aligned} \forall X0.((v2\_polyform\ X0)\wedge((v3\_polyform\ X0)\wedge((v4\_polyform \\ X0)\wedge(l1\_polyform\ X0))))\Rightarrow(\forall X1.(v1\_int\_1\ X1)\Rightarrow(\forall X2. \\ (v7\_ordinal1\ X2)\Rightarrow(((r1\_xxreal\_0\ np\_1\ X2)\wedge(r1\_xxreal\_0\ X2\ (k11\_polyform \\ X0\ X1))))\Rightarrow(k15\_polyform\ X0\ X1\ X2 = k1\_funct\_1\ (k10\_polyform\ X0\ X1) \\ X2)))) \end{aligned} \quad (24)$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1)\Rightarrow(v7\_ordinal1\ X0) \quad (25)$$

Assume the following.

$$\forall X0.((v3\_ordinal1\ X0)\wedge(v1\_finset\_1\ X0))\Rightarrow(v7\_ordinal1\ X0) \quad (26)$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge(v3\_valued\_0\ X0))\Rightarrow((v1\_relat\_1 \\ X0)\wedge(v2\_valued\_0\ X0)) \quad (27)$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge(v5\_relat\_1\ X0\ k4\_numbers))\Rightarrow((v1\_relat\_1 \\ X0)\wedge(v3\_valued\_0\ X0)) \quad (28)$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow((v7\_ordinal1\ X0)\wedge(\neg v3\_xxreal\_0\ X0)) \quad (29)$$

Assume the following.

$$\forall X0.(v1\_int\_1\ X0)\Rightarrow(v1\_xxreal\_0\ X0) \quad (30)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1\ X1\ X0)\Rightarrow(v5\_relat\_1\ X1\ X0) \quad (31)$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(v1\_xxreal\_0\ X0) \quad (32)$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k5\_numbers)\Rightarrow(\neg v3\_xxreal\_0\ X0) \quad (33)$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(v1\_int\_1\ X0) \quad (34)$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_finseq\_1\ X0)))\Rightarrow \\ ((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_finset\_1\ X0))) \quad (35)$$

Assume the following.

$$\forall X0.(v1\_card\_1\ X0)\Rightarrow(v3\_ordinal1\ X0) \quad (36)$$

**Theorem 1**

$$\forall X0.((v2\_polyform\ X0)\wedge((v3\_polyform\ X0)\wedge((v4\_polyform\ X0)\wedge(l1\_polyform\ X0))))\Rightarrow(k15\_polyform\ X0\ (k7\_polyform\ X0)\ np_{-1} = X0)$$