t40_polyform (TMG6BiPVAkPmvSBsUv7jM2L2GjteKSwug7Z)

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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 $v1\_int\_1 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k17\_polyform : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8\_polyform : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k4\_rlvect\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_bspace : \iota$ be given. Let $k19\_polyform : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_rlvect\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_fvsum\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((v2\_polyform\ X0) \wedge ((v3\_polyform\ X0) \wedge ((v4\_polyform\ X0) \wedge (l1\_polyform\ X0)))) \Rightarrow (\forall X1.(v1\_int\_1\ X1) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ (k17\_polyform\ X0\ X1))) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ (k17\_polyform\ X0\ X1))) \Rightarrow (\forall X4.(m1\_subset\_1\ X4\ (k8\_polyform\ X0\ (k6\_xcmplx\_0\ X1\ np\_\_1))) \Rightarrow (k4\_rlvect\_1\ k2\_bspace\ (k3\_fvsum\_1\ k2\_bspace\ (k19\_polyform\ X0\ X1\ X4\ X2)\ (k19\_polyform\ X0\ X1\ X4\ X3)) = k3\_rlvect\_1\ k2\_bspace\ (k4\_rlvect\_1\ k2\_bspace\ (k19\_polyform\ X0\ X1\ X4\ X2))\ (k4\_rlvect\_1\ k2\_bspace\ (k19\_polyform\ X0\ X1\ X4\ X3)))))))) \tag{1}$$

Assume the following.

$$\forall X0.((v2\_polyform\ X0) \wedge ((v3\_polyform\ X0) \wedge ((v4\_polyform\ X0) \wedge (l1\_polyform\ X0)))) \Rightarrow (\forall X1.(v1\_int\_1\ X1) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ (k17\_polyform\ X0\ X1))) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ (k17\_polyform\ X0\ X1))) \Rightarrow (\forall X4.(m1\_subset\_1\ X4\ (k8\_polyform\ X0\ (k6\_xcmplx\_0\ X1\ np\_\_1))) \Rightarrow (k19\_polyform\ X0\ X1\ X4\ (k3\_rlvect\_1\ (k17\_polyform\ X0\ X1)\ X2\ X3) = k3\_fvsum\_1\ k2\_bspace\ (k19\_polyform\ X0\ X1\ X4\ X2)\ (k19\_polyform\ X0\ X1\ X4\ X3)))))) \tag{2}$$

Theorem 1

$$\forall X0.((v2\_polyform\ X0)\wedge((v3\_polyform\ X0)\wedge((v4\_polyform\ X0)\wedge(l1\_polyform\ X0))))\Rightarrow(\forall X1.(v1\_int\_1\ X1)\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ (k17\_polyform\ X0\ X1)))\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ (k17\_polyform\ X0\ X1)))\Rightarrow(\forall X4.(m1\_subset\_1\ X4\ (k8\_polyform\ X0\ (k6\_xcmplx\_0\ X1\ np\_\_1)))\Rightarrow(k4\_rlvect\_1\ k2\_bspace\ (k19\_polyform\ X0\ X1\ X4\ (k3\_rlvect\_1\ (k17\_polyform\ X0\ X1)\ X2\ X3))) = k3\_rlvect\_1\ k2\_bspace\ (k4\_rlvect\_1\ k2\_bspace\ (k19\_polyform\ X0\ X1\ X4\ X2))\ (k4\_rlvect\_1\ k2\_bspace\ (k19\_polyform\ X0\ X1\ X4\ X3)))))))$$