

t8\_polyeq\_5  
(TMSar2bdjorrVh55LBGFVUDR5FLiHwo8v7s)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k1\_polyeq\_5 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_power : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $k7\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k17\_complex1 : \iota \Rightarrow \iota$  be given. Let  $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k1\_comptrig : \iota \Rightarrow \iota$  be given. Let  $k21\_sin\_cos : \iota \Rightarrow \iota$  be given. Let  $k18\_sin\_cos : \iota \Rightarrow \iota$  be given. Let  $k20\_sin\_cos : \iota \Rightarrow \iota$  be given. Let  $k4\_xcmplx\_0 : \iota \Rightarrow \iota$  be given. Let  $k17\_sin\_cos : \iota \Rightarrow \iota$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $np\_0 : \iota$  be given. Let  $k1\_xcmplx\_0 : \iota$  be given. Let  $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_complex1 : \iota$  be given. Let  $k13\_complex1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v1\_xboole\_0 X0) \Rightarrow (X0 = k1\_xboole\_0) \quad (1)$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (k7\_xcmplx\_0 k6\_numbers X0 = k6\_numbers) \quad (2)$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0 X0) \Rightarrow ((r1\_xxreal\_0 k6\_numbers X0) \Rightarrow (k17\_complex1 X0 = X0)) \quad (3)$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (k3\_xcmplx\_0 np\_1 X0 = X0) \quad (4)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow ((r1\_xxreal\_0 k6\_numbers X0) \Rightarrow (k1\_comptrig X0 = k6\_numbers)) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow & ((k21\_sin\_cos k6\_numbers = np\_1) \wedge \\ & ((k18\_sin\_cos k6\_numbers = k6\_numbers) \wedge ((k20\_sin\_cos (k4\_xcmplx\_0 \\ & X0) = k20\_sin\_cos X0) \wedge (k17\_sin\_cos (k4\_xcmplx\_0 X0) = k4\_xcmplx\_0 \\ & (k17\_sin\_cos X0)))))) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1\_subset\_1 X0 X1) \quad (7)$$

Assume the following.

$$\begin{aligned} ((v2\_xxreal\_0 np\_1) \wedge (m2\_subset\_1 np\_1 k1\_numbers k5\_numbers)) \wedge \\ ((m1\_subset\_1 np\_1 k5\_numbers) \wedge (m1\_subset\_1 np\_1 k1\_numbers)) \end{aligned} \quad (8)$$

Assume the following.

$$v1\_xboole\_0 np\_0 \quad (9)$$

Assume the following.

$$k3\_xcmplx\_0 np\_0 k1\_xcmplx\_0 = np\_0 \quad (10)$$

Assume the following.

$$k2\_xcmplx\_0 np\_1 np\_0 = np\_1 \quad (11)$$

Assume the following.

$$k7\_complex1 = k1\_xcmplx\_0 \quad (12)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (13)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow (k21\_sin\_cos X0 = k20\_sin\_cos X0) \quad (14)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow (k18\_sin\_cos X0 = k17\_sin\_cos X0) \quad (15)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v1\_xcmplx\_0 X0) \wedge (v1\_xcmplx\_0 X1)) \Rightarrow ( \\ k13\_complex1 X0 X1 = k7\_xcmplx\_0 X0 X1) \end{aligned} \quad (16)$$

Assume the following.

$$\exists X0.(v1\_xboole\_0 X0) \wedge ((v1\_xcmplx\_0 X0) \wedge ((v1\_xxreal\_0 X0) \wedge (v1\_xreal\_0 X0))) \quad (17)$$

Assume the following.

$$\forall X0.\forall X1.((v7\_ordinal1 X0) \wedge (v1\_xreal\_0 X1)) \Rightarrow (v1\_xreal\_0 (k1\_power X0 X1)) \quad (18)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Leftrightarrow (X0 \in k1\_numbers) \quad (19)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v1\_xboole\_0 X0) \wedge (v7\_ordinal1 X0)) \Rightarrow (\forall X1. \\ & (v1\_xcmplx\_0 X1) \Rightarrow (k1\_polyeq\_5 X0 X1 = k3\_xcmplx\_0 (k1\_power X0 \\ & (k17\_complex1 X1)) (k2\_xcmplx\_0 (k20\_sin\_cos (k13\_complex1 ( \\ & k1\_comptrig X1) X0)) (k3\_xcmplx\_0 (k17\_sin\_cos (k13\_complex1 \\ & (k1\_comptrig X1) X0)) k7\_complex1)))) \end{aligned} \quad (20)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0 X0) \wedge (v1\_xcmplx\_0 X1)) \Rightarrow (k3\_xcmplx\_0 X0 X1 = k3\_xcmplx\_0 X1 X0) \quad (21)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (v1\_xcmplx\_0 X0) \quad (22)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (v1\_xcmplx\_0 X0) \quad (23)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow (v1\_xcmplx\_0 X0) \quad (24)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((\neg v1\_xboole\_0 X0) \wedge (v7\_ordinal1 X0)) \Rightarrow (\forall X1. \\ & (v1\_xreal\_0 X1) \Rightarrow ((r1\_xxreal\_0 k6\_numbers X1) \Rightarrow (k1\_polyeq\_5 X0 \\ & X1 = k1\_power X0 X1))) \end{aligned}$$