

t40_polyeq_3
(TMHjMkfQS8voxhtTo8Jf84FQvXmrKGUQAf)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $r1_xreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k1_newton : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k17_complex1 : \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_abian : \iota \Rightarrow o$ be given. Let $k1_power : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k2_newton : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_sin_cos : \iota \Rightarrow \iota$ be given. Let $k6_complex1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((\neg \\ (\neg(r1_xreal_0 np_1 X1) \wedge (r1_xreal_0 k6_numbers X0)) \wedge (v1_abian \\ X1)) \Rightarrow ((k1_newton (k1_power X1 X0) X1 = X0) \wedge (k1_power X1 (k1_newton \\ X0 X1) = X0)))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (r1_xreal_0 k6_numbers (k17_complex1 X0)) \tag{2}$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 \\ X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \tag{3}$$

Assume the following.

$$k6_numbers = k1_xboole_0 \tag{4}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{5}$$

Assume the following.

$$\forall X0. \forall X1. ((m1_subset_1 X0 k1_numbers) \wedge (v7_ordinal1 X1)) \Rightarrow (k2_newton X0 X1 = k1_newton X0 X1) \quad (6)$$

Assume the following.

$$\forall X0. (m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow (\forall X1. (v1_xcmplx_0 X1) \Rightarrow ((k8_nat_1 k2_numbers (k3_sin_cos X1) np_1 = X1) \wedge ((k8_nat_1 k2_numbers (k3_sin_cos X1) k6_numbers = k6_complex1) \wedge (k17_complex1 (k1_newton X1 X0) = k2_newton (k17_complex1 X1) X0)))) \quad (7)$$

Assume the following.

$$(\neg v1_xboole_0 k4_ordinal1) \wedge (v3_ordinal1 k4_ordinal1) \quad (8)$$

Assume the following.

$$\neg v1_xboole_0 k1_numbers \quad (9)$$

Assume the following.

$$m1_subset_1 k5_numbers (k1_zfmisc_1 k1_numbers) \quad (10)$$

Assume the following.

$$\forall X0. (v1_xcmplx_0 X0) \Rightarrow (m1_subset_1 (k17_complex1 X0) k1_numbers) \quad (11)$$

Assume the following.

$$k1_xboole_0 = the (\lambda X0 : \iota. v1_xboole_0 X0) \quad (12)$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \quad (13)$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 k2_numbers) \Rightarrow (v1_xcmplx_0 X0) \quad (14)$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xreal_0 X0) \quad (15)$$

Theorem 1

$$\forall X0. (m1_subset_1 X0 k2_numbers) \Rightarrow (\forall X1. (m1_subset_1 X1 k2_numbers) \Rightarrow (\forall X2. (m1_subset_1 X2 k5_numbers) \Rightarrow (((r1_xreal_0 np_1 X2) \wedge (k1_newton X1 X2 = k1_newton X0 X2)) \Rightarrow ((X1 = k6_numbers) \vee ((X0 = k6_numbers) \vee (k17_complex1 X1 = k17_complex1 X0))))))$$