

t10_uniroots
(TMSCvSgJ7kfBaxpnfqg7VBK1Dc18z9HXQS)

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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 $k1_hahnban1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k21_sin_cos : \iota \Rightarrow \iota$ be given. Let $k12_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $k32_sin_cos : \iota$ be given. Let $k18_sin_cos : \iota \Rightarrow \iota$ be given. Let $k4_nat_d : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.(m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow (\forall X1. \\
& (m2_subset_1 X1 k1_numbers k5_numbers) \Rightarrow ((k21_sin_cos (k12_binop_2 \\
& (k11_binop_2 (k11_binop_2 np_2 k32_sin_cos) X1) X0) = k21_sin_cos \\
& (k12_binop_2 (k11_binop_2 (k11_binop_2 np_2 k32_sin_cos) (k4_nat_d \\
& X1 X0)) X0) \wedge (k18_sin_cos (k12_binop_2 (k11_binop_2 (k11_binop_2 \\
& np_2 k32_sin_cos) X1) X0) = k18_sin_cos (k12_binop_2 (k11_binop_2 \\
& (k11_binop_2 np_2 k32_sin_cos) (k4_nat_d X1 X0)) X0))))
\end{aligned} \tag{1}$$

Theorem 1

$$\begin{aligned}
& \forall X0.(m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow (\forall X1. \\
& (m2_subset_1 X1 k1_numbers k5_numbers) \Rightarrow (k1_hahnban1 (k21_sin_cos \\
& (k12_binop_2 (k11_binop_2 (k11_binop_2 np_2 k32_sin_cos) X1) \\
& X0)) (k18_sin_cos (k12_binop_2 (k11_binop_2 (k11_binop_2 np_2 \\
& k32_sin_cos) X1) X0)) = k1_hahnban1 (k21_sin_cos (k12_binop_2 \\
& (k11_binop_2 (k11_binop_2 np_2 k32_sin_cos) (k4_nat_d X1 X0)) \\
& X0)) (k18_sin_cos (k12_binop_2 (k11_binop_2 (k11_binop_2 np_2 \\
& k32_sin_cos) (k4_nat_d X1 X0)) X0))))
\end{aligned}$$