

l43_pdiff_4

(TMba9mLi9DKsw6UvS3joLR4nzPQF9aaeZ8p)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k7_euclid : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_3 : \iota$ be given. Let $k1_euclid_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k9_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. ((v1_xreal_0 X0) \wedge (v1_xreal_0 X1)) \Rightarrow (k9_binop_2 X0 X1 = k2_xcmplx_0 X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((m1_subset_1 X0 k1_numbers) \wedge (v1_xreal_0 X1)) \Rightarrow (k7_real_1 X0 X1 = k2_xcmplx_0 X0 X1) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. (m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1. (m1_subset_1 X1 k1_numbers) \Rightarrow (\forall X2. (m1_subset_1 X2 k1_numbers) \Rightarrow (\forall X3. \\ (m1_subset_1 X3 k1_numbers) \Rightarrow (\forall X4. (m1_subset_1 X4 k1_numbers) \Rightarrow \\ (\forall X5. (m1_subset_1 X5 k1_numbers) \Rightarrow (k7_euclid np_3 (k1_euclid_8 \\ X0 X1 X2) (k1_euclid_8 X3 X4 X5) = k1_euclid_8 (k9_binop_2 X0 X3) (\\ k9_binop_2 X1 X4) (k9_binop_2 X2 X5)))))))))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xreal_0 X0) \quad (4)$$

Theorem 1

$$\begin{aligned} \forall X0. (m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1. (m1_subset_1 X1 k1_numbers) \Rightarrow (\forall X2. (m1_subset_1 X2 k1_numbers) \Rightarrow (\forall X3. \\ (m1_subset_1 X3 k1_numbers) \Rightarrow (\forall X4. (m1_subset_1 X4 k1_numbers) \Rightarrow \\ (\forall X5. (m1_subset_1 X5 k1_numbers) \Rightarrow (k7_euclid np_3 (k1_euclid_8 \\ X0 X1 X2) (k1_euclid_8 X3 X4 X5) = k1_euclid_8 (k7_real_1 X0 X3) (k7_real_1 \\ X1 X4) (k7_real_1 X2 X5)))))))))) \end{aligned}$$