

t14_euclid_5 (TMYwDnarcXrqbQmJekiQxh- mZvbYRpPSdZYh)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $np_3 : \iota$ be given. Let $k4_euclid_5 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_euclid_5 : \iota \Rightarrow \iota$ be given. Let $k2_euclid_5 : \iota \Rightarrow \iota$ be given. Let $k3_euclid_5 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ & X1 k1_numbers) \Rightarrow (\forall X2.(m1_subset_1 X2 k1_numbers) \Rightarrow ((k1_euclid_5 \\ & (k4_euclid_5 X0 X1 X2) = X0) \wedge ((k2_euclid_5 (k4_euclid_5 X0 X1 X2) = \\ & X1) \wedge (k3_euclid_5 (k4_euclid_5 X0 X1 X2) = X2)))))) \end{aligned} \tag{1}$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ & X1 k1_numbers) \Rightarrow (\forall X2.(m1_subset_1 X2 k1_numbers) \Rightarrow (\forall X3. \\ & (m1_subset_1 X3 (u1_struct_0 (k15_euclid np_3))) \Rightarrow ((X3 = k4_euclid_5 \\ & X0 X1 X2) \Rightarrow ((k1_euclid_5 X3 = X0) \wedge ((k2_euclid_5 X3 = X1) \wedge (k3_euclid_5 \\ & X3 = X2)))))))) \end{aligned}$$